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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,156	10/05/2000	Stephen D. MacArthur	07072-115001	9150

22494 7590 12/18/2003

DALY, CROWLEY & MOFFORD, LLP
SUITE 101
275 TURNPIKE STREET
CANTON, MA 02021-2310

EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/18/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application

09/680,156

Examiner

Dohm Chankong

Applicant(s)

MACARTHUR ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1 and 2 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,651,130 to Thibault.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor

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of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

4. As to claim 1, Thibault teaches a method for transferring data between a host computer/server and a bank of disk drives through a system interface, such system interface comprising: a plurality of first directors coupled to the host computer/server; a plurality of second directors coupled to the bank of disk drives; a data transfer section couple to the plurality of first directors and second directors; and a messaging network coupled to the plurality of first directors and the plurality of second directors, such first and second directors controlling data transfer between the host computer and the bank of disk drives in response to messages passing between the directors through the messaging network as such data passes through the data transfer section, such method comprising:

preparing in a transmitting one of the directors, a message to be sent to a receiving one, or ones of the directors;

transmitting such message to said receiving one, or ones, of the directors through the messaging network;

receiving in one of the receiving one or ones of the directors the transmitted message;

determining in such receiving one, or ones, the receiving directors whiter the received packet is from a proper, or an improper transmitting one of the directors;

rejecting the message if it is from an improper transmitting one of the directors and further processing such message if it is from a proper one of the transmitting directors (abstract, Figure 2, column 19, lines 9-42, claims 1 and 5).

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5. As to claim 2, Thibault teaches a method including having the receiving, one or one, of the directors send an acknowledge receipt of the packet to said transmitting one of the transmitting such packet (column 19, lines 43-64).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 2 are rejected under 35 U.S.C 103(a) as being unpatentable over Nakayama et al, U.S Patent No. 5,920,893 in view of Idleman et al, U.S Patent No. 5,274,645.

8. As to claim 1, Nakayama et al teaches a method for transferring data between a host computer/server and a bank of disk drives through a system interface, such system interface comprising: a plurality of first directors coupled to the host computer/server; a plurality of second directors coupled to the bank of disk drives; a data transfer section couple to the plurality of first directors and second directors and a messaging network coupled to the plurality of first directors and the plurality of second directors, such first and second directors controlling data transfer between the host computer and the bank of disk drives in response to messages passing between the directors through the messaging network as such data passes through the data transfer section, such method comprising:

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preparing in a transmitting one of the directors, a message to be sent to a receiving one, or ones of the directors;

transmitting such message to said receiving one, or ones, of the directors through the messaging network;

receiving in one of the receiving one or ones of the directors the transmitted message

(Figure 3, column 2, lines 27-35, column 4, line 42 to column 5, line 13 and column 6, lines 45-50).

Nakayama et al does not teach:

determining in such receiving one, or ones, the receiving directors whether the received packet is from a proper, or an improper transmitting one of the directors;

rejecting the message if it is from an improper transmitting one of the directors and further processing such message if it is from a proper one of the transmitting directors

9. It would have been obvious to modify Nakayama et al such that the first level director and second level director would determine whether a received message is from a proper source, and to consequently reject the received message if the source is improper as such a modification is well known in the art, and therefore involves only routine skill in the art.

10. As to claim 2, Nakayama et al does not explicitly teach a method including having the receiving, one or ones, of the directors send an acknowledge receipt of the packet to said transmitting one of the transmitting such packet.

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11. It would have been obvious to modify Nakamata et al's messaging network so that it included acknowledgement functionality between the first and second level directors as such a modification is well known in the art, and therefore involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to data storage systems in general:

U.S Patent No. 5,274,645 to Idleman et al

U.S Patent No. 6,061,274 to Thibault et al

U.S Patent No. 6,230,229 to Van Krevelen et al

U.S Patent No. 6,397,281 to MacLellan et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

DC


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100